

METHOD, SYSTEM AND COMPUTER PRODUCT FOR BUILDING CALIBRATION LOOKUP TABLES FROM SPARSE DATA

Abstract of Disclosure

A method for building calibration lookup tables from sparse data. The method comprises initializing the lookup table including initializing a Kalman filter corresponding to the lookup table, where the Kalman filter includes state estimates that correspond to table element values in the lookup table. The method further comprises receiving sensor measurement data and applying the sensor measurement data to the lookup table. Applying the sensor measurement data to the lookup table includes updating the Kalman filter in response to the sensor measurement data. The method further comprises receiving a constraint on the table element values and receiving an output request. A duplicate copy of the Kalman filter is stored in response to receiving the output request. The constraint is applied to the lookup table in response to receiving the output request and to the storing. Applying the constraint includes updating the Kalman filter in response to the constraint. The method further includes outputting a lookup table element in response to the applying the constraint and the output request. The Kalman filter is replaced with the duplicate copy of the Kalman filter in response to the outputting.

Figures